

CONTRA-ANGLE USED FOR ENDODONTOLGY

The subject of the present invention is a handpiece or contra-angle, used for endodontology.

- The prior art already knows various instruments of this type, used either to prepare or to bore tooth canals. These instruments may be mechanized or manual; they may equally operate in continuous rotation or in reciprocating rotation. This rotational movement is allowed by virtue of a contra-angle piece on which the instrument is positioned. The instrument is generally equipped with a shank, defined by ISO 1797, penetrating the head of the contra-angle, which head is equipped with mechanical means allowing the instrument to be attached removably.
- In this type of instrument known from the prior art, the user has always to remove the instrument from the shank each time he changes operation, and this increases the risks of prick injury and therefore the risks of contamination both as far as the user and as far as the patient are concerned.

Furthermore, the means for clamping the instrument onto the shank are bulky, which prevents small heads from being produced, thus restricting the visibility that the user has.

- The invention proposes to remedy these various disadvantages by proposing an endodontal handpiece that does not require a change of instrument for each new operation.

To do this, the subject of the present invention is an endodontal contra-angle (1) equipped with a head (2) supporting an endontontal instrument (3), and with attachment means (5) for attaching a shank (4) penetrating the head of the contra-angle, characterized in that said head (2) of the contra-angle (1) is

equipped with a member that is free to rotate (6), assembled fixedly to the body of said head (2).

The invention will be better understood with the aid of the description given hereinafter with reference to the  
5 attached drawing which depicts an endodontal handpiece according to the invention.

The contra-angle (1) is equipped with a head (2) on which a member (6) is positioned. This member will find itself free to rotate about the head (2) of the contra-angle (1) but will be permanently fixed to the body of the head (2). That allows the rotational movement of  
10 the instrument (3).

According to an advantageous characteristic of the invention, the contra-angle (1) is equipped with a head (2) made entirely of plastic, constituting a reusable part and thus limiting costs.  
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According to an advantageous characteristic of the invention, the member present on the head (2) of the contra-angle (1) is a pinion.

20 According to another advantageous characteristic of the invention, this pinion is made of a material which can be injection-molded, such as plastic.

According to an advantageous characteristic of the invention, a blade of a canal instrument is fixed to  
25 the pinion. The pinion is overmolded onto the blade of the canal instrument, thus securing these two elements together.

Although the invention has been described using particular embodiments, it encompasses all technical  
30 equivalents of the means described.